

Committee(s)	Dated:
Corporate Asset Sub-Committee (CASC)	18 th November 2020
Subject: 2020/21 Energy Performance Q2 Update	Public
Which outcomes in the City Corporation's Corporate Plan does this proposal aim to impact directly?	5,11 & 12
Does this proposal require extra revenue and/or capital spending?	No
If so, how much?	£ n/a
What is the source of Funding?	Revenue
Has this Funding Source been agreed with the Chamberlain's Department?	Yes
Report of: The City Surveyor	For Decision
Report author: Graeme Low / James Rooke	

Summary

This report presents the 2020/21 quarter 2 energy performance for CoL operational sites.

The Q2 result for 2020/21 was an **11.4%** reduction in energy consumption from Q2 2019/20 when corrected for the impact of weather. Compared to the 2008/09 baseline the energy consumption reduced by **28.9%** in absolute terms.

Since 2008/9 the operational CO₂ emissions have reduced by 27,000 tonnes, through a combination of energy reduction in buildings and grid decarbonisation.

This continued reduction in 2020/21 was largely due to the reduction in building related activities and operations as a result of the coronavirus lockdown. Work by the Energy Team, particularly on Building Management Systems has enabled these savings to be captured.

Recommendation(s)

- Note the performance of Corporate building stock in quarter 2.
- Member support to develop a central funding pot for all energy projects, utilising grant funding, third party finance, carbon offset and capital funding.
- Member support for aligning the current KPI data and reporting with Climate Action targets from 2021/2022.

Main Report

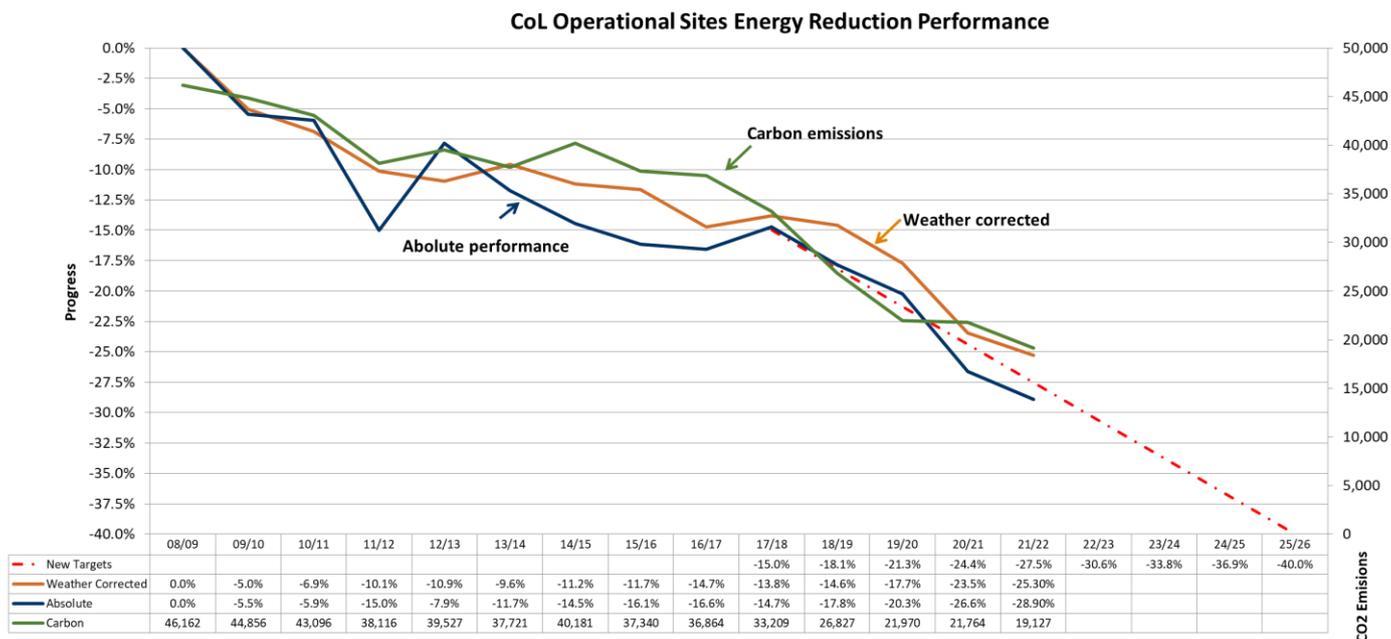
Background

1. At CAsC on 15/09/20 the year end 19/20 and Q1 Energy performance report was presented. This identified the Q1 Energy Performance as an 8.9% improvement on previous the same period in 2019/20. This unprecedented saving was largely due to the closure of buildings due to the Covid-19 lockdown which occurred across this period. The Carbon Descent Plan aims to reduce our weather corrected energy consumption by 40%.

Current Position

Performance Update

Chart 1. Overall performance Q2



2. **Long term:** chart 1 presents an update on the long-term performance against target, including the interim performance up to Q2 20/21. Compared to the 2008/09 baseline the performance up to Q2 2019/20 indicates a 28.9% reduction in absolute energy consumption, translating to a 25.3% reduction when corrected for the weather. This represents excellent progress towards achieving the target for the year and we remain broadly on target to reach the 40% reduction target by 2025/26. There have been some changes to the portfolio over this time, and the addition of 21 New St has been balanced against CoL Police disposals including Snow Hill.

Table 1. Overall performance Q2 Top 5 and bottom 5 sites.

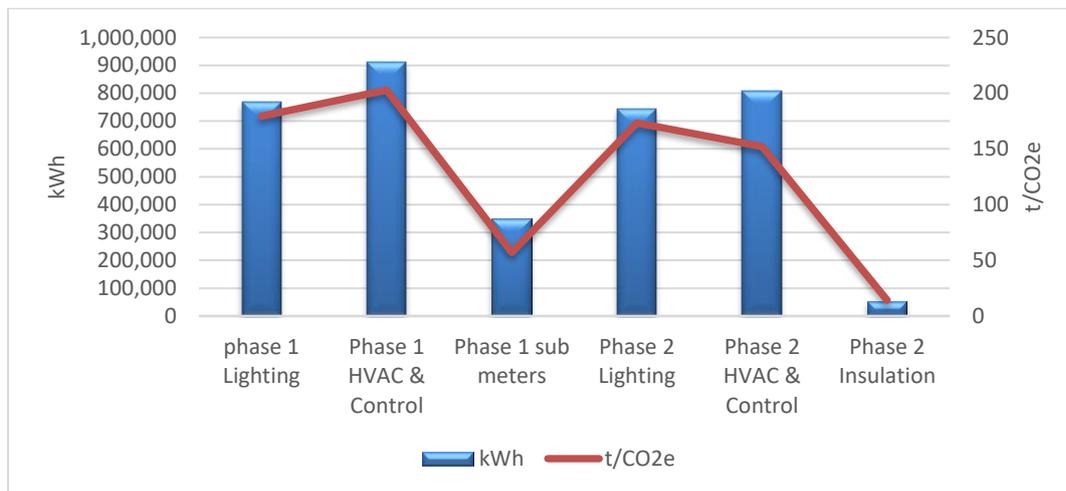
Weather corrected rolling 12-month comparison: 12 months to Sept-20 (20/21) compared to 12 months to Sept-19 (2019/20)				
Site Name	Sep-19	Sept-20	kWh Diff.	Diff. %
Top 5				
Smithfield Mkt	18,249,797	14,234,816	-4,014,981	-22%
Guildhall Complex	19,449,229	16,670,099	-2,779,130	-14%
Bishopsgate Police Station	3,360,538	1,785,869	-1,574,669	-47%
GSMD - Milton Court	3,453,842	2,466,128	-987,715	-29%
LMA	1,225,941	592,895	-633,046	-52%
Bottom 5				
Walbrook Wharf Cleansing Depot	1,516,192	1,950,552	434,359	29%
City of London Freeman's School	4,126,943	4,460,135	333,192	8%
Mansion House	2,187,394	2,487,341	299,948	14%
City of London School	2,701,919	2,924,812	222,893	8%
Open Spaces Epping Forest	585,311	789,399	204,087	35%

- Table 1 provides a snapshot of the highest energy reductions and the greatest increases within the top 30 buildings over the past 12 months to September when compared to the previous 12 months. The full list of site performance can be found within Appendix 1.

Energy Team Activity

Progress on Energy projects

- Phase 1 & 2** – Phase 1 energy projects are progressing to gateway 3/4 stage for January 2021 committees. Projects may be eligible for central government funding through the £1bn Public Sector Decarbonisation Fund, which we are currently investigating. Phase 1 projects will save £263k per annum and 438 t/CO_{2e} per annum.
- Phase 2 projects have recently been submitted for capital approval, estimated to save £200k and 340 t/CO₂ per annum.
- Chart 2.** Energy Projects Phase 1 & 2 kWh and Carbon savings per annum.



- Grant Funding:** Several grant funding opportunities have been recently launched by Government to support the economic recovery, focusing on job creation and tackling climate change, these funds total over £3bn. The Energy Team are in the process of reviewing and applying for funding where possible, ensuring we can continue to maximise the opportunities to reduce energy and carbon emissions. **Appendix 2** highlights the funds currently open or planned for the near future, and those which we aim to prioritise. We seek support from members to pursue this funding and recommend regular updates to monitor progress.
- Energy Management system replacement:** The Energy Team are drawing together the specification for the replacement of the outdated Systemslink software. Key stakeholder engagement activities are planned for late November. It is anticipated the new system will be operational in March 2021, following a managed transition between systems. As part of this project it is proposed that KPI energy data and reporting should be aligned to the Climate Action Strategy.
- Retrofit Accelerator – workplaces (RA-W):** This is a GLA framework developed to support in procuring and delivering energy efficiency measures. The Energy Team have begun discussions to review our project pipeline with the RA-W team. The framework will help ensure that time limited grant funding can be captured through utilising its resource

and expertise. Support for this approach is requested from CAsC to ensure that grant funding opportunities can be effectively captured with RA-W resource support.

10. **Energy Supply contract procurement:** Gas and Electricity Contracts are being procured at present for the period October 21 onwards. The energy purchases will be made using agreed "*Purchase in Advance*" pricing strategy. This will ensure that sufficient trading opportunities will exist before the commencement of the contract to reduce any short-term purchasing risks. Significant cost savings are anticipated.
11. **Citigen renegotiation:** Contractual discussions are ending. These have centred on three key strands:
 - Renegotiation of tariffs
 - Network expansion
 - Future decarbonisation & heat pump project.
12. **Sustainable Buildings Action Plan (JLL report):** The Energy Team have developed with JLL a road map and action plan required to ensure a long-term sustainable building portfolio, centred on long term value and resilience. An informal briefing session will be held following CAsC on 18th November.
13. **PPA:** Currently in its final stages of negotiation, we anticipate the contract award at year end. Consecutively, sleeving arrangements are being discussed with our electricity supplier, Total Gas and Power. The current scheduled start date for the PPA is 01/12/21.
14. **Markets:** We have completed a feasibility study on improvement works to the HVAC at Smithfield, which has been included in our Phase 2 capital bid. We continue to monitor the site remotely on a weekly basis and liaise with site FM on occupancy needs and maintenance issues. We have developed a proposal for Markets which provides additional support for Vendors through energy awareness workshops, helping them to reduce their costs, carbon and energy consumption. Our Energy Engineers are currently carrying out energy audits at New Spitalfields and Billingsgate Markets, New Spitalfields market audit took place on 21/10/20.
15. **Barbican:** The exhibition halls heating issue has been reduced over Q2 due to lower summer demand and heating circuits have been turned off. This will be monitored during the heating season. Funding applications are being progressed to replace the faulty valves and optimise the heating circuits.

The Art Centre Chiller replacement project has begun and is currently being procured. Until a replacement unit is installed Citigen will provide the cooling required, though this will have a lower demand during Q3 & Q4. The overall trend for heating over the last quarter has also reduced. The Energy team will continue to monitor and pursue a replacement of faulty valves.

Corporate & Strategic Implications

16. **Strategic implications:** Energy performance is linked to resilience; our reduction helps to ensure the local energy grid is more resilient. We support a thriving economy through ensuring environmental responsibility. Additionally, our energy performance helps to shape outstanding environments through the reduction of CO₂ emissions and our commitment to procuring clean renewable energy. In this way our energy performance helps shape outcomes 5, 11 and 12 of the Corporate Plan.
17. **Financial implications:** Energy use is directly linked to cost. It is therefore financially within the City of London's interests to manage energy usage to avoid additional associated costs.

18. Climate implications: Energy performance has a direct impact on the Climate. As such performance improvements are a key metric in measuring our trajectory to meeting the ambitions of the Climate Action Strategy and reaching Net Zero Carbon

Conclusion

19. The Energy performance within Q2 has seen a sustained reduction in consumption across all sites. This highlights the extended impact of Covid-19 which has led to our office accommodation having significantly less occupants, and restricted operational hours. A lack of events and public access to many sites has added to this general trend. Whilst we anticipate an increase going into autumn and winter due to the need for higher levels of ventilation and heat loss it is difficult to predict the overall impact we are likely to see.

20. There is a significant opportunity to capture grant funding, which will ensure any capital funding available can be prioritised towards further carbon reduction projects as identified as part of the recent bids in support of the Climate Action Strategy. In order to capture this funding, we must be agile and act fast. Deadlines for bid applications are due shortly, however the speed of delivery is a challenge, with projects to be completed within 12 months. This will need support from members and an ability to act quickly and ensure the funding opportunity is not wasted. We ask for your support in realising this opportunity.

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